

CAPITAL IMPROVEMENT AND CONSERVATION IMPLEMENTATION PROGRAMS

The Department maintains long-range capital improvement and conservation implementation programs to ensure the availability of adequate supplies of power and to provide a high level of service reliability to its various customer groups. The six-year Capital Improvement Program (“CIP”) for the Department forms a part of the City’s Comprehensive Capital Improvement Program, which is mandated by the State’s Growth Management Act. The City’s biennial budget process determines the annual funding levels for both the CIP and the Conservation Implementation Program.

The Department’s 2003-2008 CIP emphasizes projects that address the long-term performance and reliability of its hydroelectric generation plants, substations and distribution systems. The Department’s Conservation Implementation Program provides funding for investments in the commercial and industrial sectors of the service territory to achieve the Department’s long-term energy savings goal.

The sections below describe the CIP and Conservation Improvement Program that are included in the City’s adopted budget for the 2003-04 Biennium.

Generation

The Department plans to spend \$145.7 million on generation plant improvements over the 2003-2008 period. Expenditures of \$26.3 million are projected to complete the rehabilitation work at the Boundary Project, the Department’s largest and most economical generation resource. This rehabilitation is needed to ensure long-term reliability and to prepare for the FERC relicensing of the Boundary Project when the current license expires in 2011. Expenditures are also planned for the ongoing program of turbine runner replacement at the Boundary Project and at the Ross and Gorge Powerhouses. Mitigation measures required under the terms of the renewed FERC License for the Skagit and Newhalem Projects will require expenditures totaling \$30.8 million over the 2003-2008 period.

Transmission

Over the next six years, the Department expects to spend about \$5.9 million for expansion and replacement of transmission plant.

Substations

Substation expansion and improvements are projected to cost \$50.3 million over the 2003-2008 period. Projects include improvements to protective relaying, circuit breaker replacement, switchgear refurbishment, and transformer replacement. These capital projects are designed to maintain reliability and to increase capacity to provide for load growth.

Distribution

The Department plans to spend \$448.3 million over the 2003-2008 period on improvements and additions to its distribution system. Improvements to the downtown network distribution system, service connections, relocations, and capacity additions account for about 72 percent of these costs. Other projects in this category include the provision of electrical infrastructure related to three local transportation projects, for which the Department expects to be reimbursed for a portion of the cost.

General Plant

Programmed expenditures of \$81.0 million will support general plant projects over the 2003-2008 period. Projects include improvements to the North and South Service Centers and other facilities within the service territory. Investments in information technology, including development of Customer Data Services and Work Process Management Systems, are expected to require expenditures totaling \$45.7 million. Communications improvements, including development of a fiber optic network, advanced radio systems and improved energy management and transmission scheduling, are budgeted at \$11.0 million. Special work equipment, office equipment, replacement of vehicles, and miscellaneous building improvements make up the majority of the remaining costs in the general plant category.

High Ross Payment Amortization

In setting rates for the 2000-2003 period, the City Council directed the Department to amortize the \$21.8 million capital portion of the annual payment to B.C. Hydro under the High Ross Agreement through 2035. (See “Power Resources—The Department’s Resources—Ross, Diablo and Gorge Hydroelectric Plants.”) Each year from 2000 through the final capital payment in 2020, \$9.1 million of the annual payment will be deferred and \$12.7 million will be recognized as an expense. From 2021 through 2035, the deferred costs will be amortized through annual charges of \$12.7 million. The deferred portion of the payments to B.C. Hydro is treated as a component of capital requirements.

Conservation

Capital requirements also include \$143.3 million for the Conservation Implementation Program over the 2003-2008 period. This level of expenditure is expected to enable the Department to meet its annual target for energy savings through 2008. The emphasis of conservation programs in this period will be on the commercial and industrial sectors. See “Power Resources—Conservation.”

Other Potential Capital Projects

The Department continually reviews the need for capital improvements to its distribution and substation infrastructure in order to maintain system reliability and provide for future growth in demand. For example, the City is currently working with a number of real estate developers to develop a long-term plan for mixed-use development in the South Lake Union area, immediately north of the downtown core. If the plan is executed as currently contemplated, the City may incur significant expenditures to provide physical infrastructure for the South Lake Union area, including investments in the electrical distribution system. Adjustments to the Department’s capital improvement program may be required during the forecast period. It is also possible that other projects will be identified in the future that are not included in the Department’s current CIP.

Financing

Capital requirements of \$929.1 million from 2003 through 2008 are expected to be financed through a combination of net revenues from operations, contributions in aid of construction, external funding of conservation programs, the remaining proceeds of the 2001 Parity Bonds, the proceeds of the Bonds, and the proceeds of future Parity Bonds and Subordinate Lien Bonds. In 2003, capital financing will be provided from the remaining proceeds from the 2001 Parity Bonds, contributions in aid of construction, external conservation funding and the proceeds of the Bonds. From 2004 through 2008, net revenue available for capital financing is expected to total \$398.7 million, or 51 percent of capital requirements. The remainder of capital funding in that period is projected to be provided by contributions in aid of construction, reimbursement of costs for transportation-related projects, external conservation funding, and bond proceeds. From 2004 through 2008, Parity Bonds in the amount of \$95.0 million are expected to be issued. Subordinate Lien Bond issuances are projected to be \$120.0 million.

PROPOSED CAPITAL IMPROVEMENT AND CONSERVATION PROGRAMS (2003-2008)
(000s)

	2003	2004	2005	2006	2007	2008	Total
Generation							
Turbine Rehabilitation	\$ 1,992	\$ 7,077	\$ 1,396	\$ 10,128	\$ 7,510	\$ 243	\$ 28,346
Skagit Environmental Mitigation	8,453	1,334	9,268	3,513	4,245	3,992	30,805
Dam Safety	1,285	385	0	0	0	0	1,670
Boundary Rehabilitation Project	8,988	6,481	6,349	2,440	1,773	244	26,275
All Others	6,041	6,155	8,221	7,517	12,215	18,489	58,638
Total Generation	\$ 26,759	\$ 21,432	\$ 25,234	\$ 23,598	\$ 25,743	\$ 22,968	\$ 145,734
Transmission	\$ 923	\$ 949	\$ 962	\$ 986	\$ 1,014	\$ 1,043	\$ 5,877
Substations	\$ 6,887	\$ 8,351	\$ 8,425	\$ 8,630	\$ 8,865	\$ 9,124	\$ 50,282
Distribution							
Network Service Connections and Capacity Additions	\$ 15,524	\$ 15,163	\$ 17,213	\$ 17,567	\$ 18,473	\$ 19,011	\$ 102,951
Non-Network Service Connections	12,153	12,843	11,869	12,159	12,488	12,853	74,365
Non-Network Relocations and Capacity Additions	24,069	24,007	23,812	24,342	25,324	26,063	147,617
26KV Conversion	2,160	2,211	2,621	2,685	2,756	2,835	15,268
Regional Transit	3,951	3,695	10,092	11,978	476	490	30,682
Monorail	341	450	2,117	2,149	818	1,189	7,064
Alaskan Way Viaduct	391	509	7,589	8,533	6,892	6,784	30,698
Street and Floodlights	1,565	1,604	1,553	1,590	1,632	1,681	9,625
All Others	5,088	5,239	4,744	4,860	4,990	5,135	30,056
Total Distribution	\$ 65,242	\$ 65,721	\$ 81,610	\$ 85,863	\$ 73,849	\$ 76,041	\$ 448,326
General Plant							
Service Center Improvements	\$ 142	\$ 185	\$ 619	\$ 634	\$ 650	\$ 667	\$ 2,897
Consolidated Customer Service System	2,819	3,238	0	0	0	0	6,057
Communications Improvements	1,405	1,318	2,029	2,043	2,067	2,123	10,986
Information Technology	7,926	7,481	6,471	7,359	8,064	8,359	45,660
All Others	2,622	2,409	2,776	3,325	2,213	2,058	15,403
Total General Plant	\$ 14,914	\$ 14,632	\$ 11,895	\$ 13,361	\$ 12,994	\$ 13,207	\$ 81,003
Conservation	\$ 20,707	\$ 21,435	\$ 23,479	\$ 24,799	\$ 26,130	\$ 26,748	\$ 143,298
Deferred High Ross Expenses ⁽¹⁾	\$ 9,103	\$ 9,103	\$ 9,103	\$ 9,103	\$ 9,103	\$ 9,103	\$ 54,620
Total Expenditures All Projects	\$ 144,535	\$ 141,623	\$ 160,708	\$ 166,340	\$ 157,698	\$ 158,234	\$ 929,140
Sources of Funds							
Revenue Available for Capital Projects	\$ 0	\$ 40,239	\$ 86,723	\$ 84,672	\$ 91,803	\$ 95,275	\$ 398,712
Proceeds from Contributions ⁽²⁾	28,441	22,990	34,592	32,375	15,401	23,266	157,064
Decreases/(Increases) in Construction Fund	(23,456)	78,394	(30,092)	(4,937)	934	431	21,273
Proceeds from Parity Bonds	136,445	--	--	55,000	--	40,000	231,445
Proceeds from Subordinate Lien Bonds	--	--	70,000	--	50,000	--	120,000
Costs of Issuance and Discounts/Premiums	3,105	--	(514)	(770)	(440)	(737)	645
Total Funding for Capital Projects	\$ 144,535	\$ 141,623	\$ 160,708	\$ 166,340	\$ 157,698	\$ 158,234	\$ 929,140

(1) In adopting rates for the 2000-2003 period, the City Council directed the Department to amortize the capital portion of annual payments to the Province of British Columbia under the High Ross Agreement over a period extending through 2035. From 2000 until the final capital payment is made in 2020, the \$9.1 million deferred portion of the annual High Ross payment will be included in capital requirements. See "Power Resources—The Department's Resources."

(2) Includes contributions in aid of construction and customer payments for conservation. Also included from 2002 through 2006 are payments received from Bonneville to purchase conservation savings. See "Power Resources—Conservation."